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MULTIPLE INPUT PRODUCTIVITY INDEXES

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SECOND QUARTER UPDATE

1983 Productivity Growth Rates
(Annual Percent of Change)

	Total Factor Productivity	Labor Productivity	Capital Productivity	Capital/Labor Ratio
Private business economy	2.5%	2.7%	2.0%	0.7%
Segments:				
Farming	−7.7	−10.2	−5.4	−5.2
Manufacturing	6.3	6.2	6.5	−0.3
Non-farm/non-manufacturing	1.3	1.9	0.4	1.5
Sectors:				
Goods-producing	4.7	4.4	5.4	−1.0
Services-producing	1.0	1.6	0.1	1.5

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NOTE TO USERS OF THE MULTIPLE INPUT PRODUCTIVITY INDEXES

This edition of the Multiple Input Productivity Indexes contains substantial revisions to productivity data for the years 1982-1983. The changes are the result of federal government revisions to the underlying output series used in the calculation of productivity growth rates.

As a consequence, the data found on pages 1-7 replaces that issued in the Volume 5, Number 1 edition of the Multiple Input Productivity Indexes.

Also contained in this edition are the quarterly updates to total factor, labor and capital productivity and labor/capital ratios through the second quarter of 1984.

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SECOND QUARTER 1984 CONTINUES PRODUCTIVITY GAINS

The second quarter of 1984 showed a continuation of the good performance of the first quarter in labor and total factor productivity. For the first time in several quarters, the service industries showed stronger gains than manufacturing. That is good news if this is the beginning of stronger performance for previously lagging service segments, but it may also indicate a cyclical leveling of performance in manufacturing and other goods producers. A summary of recent performance is:

	Labor Productivity			Total Factor Productivity		
	1983	1Q84	2Q84	1983	1Q84	2Q84
	Annualized Rates					
Business Economy	2.7%	4.0%	4.0%	2.6%	5.3%	5.0%
Farming	-17.5	53.4	-4.9	-14.7	56.8	10.9
Manufacturing	4.3	3.7	3.6	4.3	5.5	4.0
Non-Farm, Non-Mfg.	3.2	2.4	5.1	2.8	3.5	5.6

The current business recovery, now six quarters old (4Q82 - 2Q84), is still basically "average" in spite of well-publicized claims to the contrary.

Six Quarter Recoveries	Labor Productivity Growth (annualized)
2Q54 - 4Q55	3.3%
2Q58 - 4Q59	2.9
4Q60 - 2Q62	4.5
4Q70 - 2Q72	4.1
1Q75 - 3Q76	4.1
2Q80 - 4Q81	1.3
Average, six previous recoveries	3.4
4Q82 - 2Q84	3.4

This edition presents substantially revised annual data for 1982 and 1983, caused by revisions in the underlying government output series. Thus the "leaders" and "laggards" designations need to be reassigned. In the 1979-83 total factor productivity performance, for example, the new scorecard is as follows:

Total Factor Productivity Growth
1979 - 1983 (annualized)

Best Performers		Worst Performers	
Textiles	3.4 %/year	Tobacco	-8.0 %/year
Electrical Machinery	3.0	Petroleum	-4.0
Apparel	2.9	Non-Rail Transport	-2.7
Rubber	2.6	Transport Equipment	-2.3
Food	2.4	Real Estate	-2.1
Communications	2.3	Finance/Insurance	-2.0

It is clear that "flat" performance in the business economy as a whole during this time hides substantial variation in performance between industry groups. Some of the best performers (Electrical Equipment and Communications) improved through good output growth and others (Textile, Apparel and Food) through labor input cuts. Several of the worst performers (Tobacco, Petroleum, Non-rail Transport and Transport Equipment) had declining outputs, partially offset by declining labor input, but continuing expansion in capital stock. Finance and Insurance had increasing output, but a double-digit increase in capital stock.

Table I
Multiple Input Productivity
By Major Segment of the Economy
(Selected Periods, 1948 - 83)

	Average Annual Rates of Change				
	1948-83	1948-65	1965-73	1973-79	1979-83
1. Total Factor Productivity					
Business Economy	1.7%	2.6%	1.7%	0.4%	0.1%
Goods Producing Industries	2.3	3.5	2.3	0.4	0.5
Service Producing Industries	1.3	1.8	1.3	0.6	0.1
Farming	3.0	4.1	3.1	1.8	0.3
Manufacturing Industry	2.0	2.6	2.3	0.7	0.9
Nonfarm Nonmanufacturing Industry	1.2	1.9	1.1	0.1	-0.1
Nonfinancial Corporate Business	1.8	2.6	1.5	0.6	0.7
2. Labor Productivity (Output per hour worked)					
Business Economy	2.3%	3.2%	2.4%	0.8%	1.1%
Goods Producing Industries	2.9	4.0	2.7	0.8	1.5
Service Producing Industries	1.8	2.3	2.1	0.7	0.8
Farming	4.3	5.3	4.8	3.2	0.4
Manufacturing Industry	2.6	3.0	2.8	1.5	2.4
Nonfarm Nonmanufacturing Industry	1.7	2.4	1.8	0.3	0.7
Nonfinancial Corporate Business	2.2	3.1	2.1	0.7	1.3
3. Capital Productivity (Output per unit of capital input)					
Business Economy	0.1%	0.8%	0.1%	-0.4%	-1.7%
Goods Producing Industries	0.2	1.1	0.8	-1.3	-2.7
Service Producing Industries	0.2	0.5	-0.2	0.3	-0.9
Farming	-0.1	-0.3	0.0	0.1	0.1
Manufacturing Industry	-0.1	0.9	0.3	-1.7	-3.0
Nonfarm Nonmanufacturing Industry	-0.1	0.4	-0.4	-0.1	-1.3
Nonfinancial Corporate Business	0.3	0.9	-0.1	0.4	-1.0

Table II

Outputs, Inputs and Capital-Labor Ratio
By Major Segment of the Economy
(Selected Periods, 1948 - 83)

	Average Annual Rates of Change				
	1948-83	1948-65	1965-73	1973-79	1979-83
1. Output (Real product, in 1972 dollars)					
Business Economy	3.2%	3.6%	3.9%	2.7%	0.7%
Goods Producing Industries	2.7	3.6	3.3	1.6	-1.1
Service Producing Industries	3.6	3.6	4.3	3.6	2.0
Farming	0.9	0.9	0.9	1.6	0.2
Manufacturing Industry	3.1	4.0	4.1	2.0	-0.9
Nonfarm Nonmanufacturing Industry	3.4	3.6	3.9	3.1	1.5
Nonfinancial Corporate Business	4.0	4.6	5.0	3.0	0.6
2. Labor Input (Hours worked)					
Business Economy	0.8%	0.4%	1.4%	1.9%	-0.3%
Goods Producing Industries	-0.2	-0.4	0.6	0.8	-2.6
Service Producing Industries	1.7	1.2	2.1	2.8	1.2
Farming	-3.2	-4.2	-3.7	-1.5	-0.3
Manufacturing Industry	0.5	1.0	1.2	0.5	-3.2
Nonfarm Nonmanufacturing Industry	1.6	1.2	2.1	2.8	0.8
Nonfinancial Corporate Business	1.7	1.5	2.9	2.3	-0.7

Table II (Cont'd)

Outputs, Inputs and Capital-Labor Ratio
By Major Segment of the Economy
(Selected Periods, 1948 - 83)

	Average Annual Rates of Change				
	1948-83	1948-65	1965-73	1973-79	1979-83
3. Capital Input					
Business Economy	3.0%	2.8%	3.8%	3.2%	2.5%
Goods Producing Industries	2.4	2.4	2.5	3.0	1.6
Service Producing Industries	3.4	3.1	4.5	3.3	2.9
Farming	1.1	1.2	0.9	1.5	0.1
Manufacturing Industry	3.2	3.1	3.7	3.8	2.2
Nonfarm Nonmanufacturing Industry	3.4	3.2	4.3	3.3	2.9
Nonfinancial Corporate Business	3.6	3.7	5.1	2.7	1.6
4. Capital - Labor Ratio					
Business Economy	2.2%	2.4%	2.3%	1.2%	2.8%
Goods Producing Industries	2.7	2.8	1.9	2.1	4.3
Service Producing Industries	1.7	1.8	2.3	0.5	1.7
Farming	4.4	5.7	4.8	3.1	0.3
Manufacturing Industry	2.8	2.1	2.5	3.2	5.6
Nonfarm Nonmanufacturing Industry	1.8	2.0	2.2	0.4	2.0
Nonfinancial Corporate Business	1.9	2.2	2.2	0.4	2.4

Table III a.

Total Factor Productivity
By Major Industries of the Economy
(Selected Periods, 1948 - 83)

	Average Annual Rates of Change				
	1948-83	1948-65	1965-73	1973-79	1979-83
Business Economy	1.7%	2.6%	1.7%	0.4%	0.1%
Goods Producing Industries	2.3	3.5	2.3	0.4	0.5
Service Producing Industries	1.3	1.8	1.3	0.6	0.1
Farming	3.0	4.1	3.1	1.8	0.3
Manufacturing	2.0	2.6	2.3	0.7	0.9
Food	2.6	2.9	4.1	0.1	2.4
Tobacco	0.7	2.3	2.1	0.3	-8.0
Textiles	3.6	3.9	3.0	3.7	3.4
Apparel	2.5	2.0	3.0	3.1	2.9
Lumber	2.5	4.5	1.3	0.2	0.2
Furniture	1.8	2.1	0.8	3.3	0.1
Paper	2.2	2.2	4.0	0.0	1.8
Printing & Publishing	1.3	2.4	1.0	-1.2	0.8
Chemicals	3.1	3.9	4.2	1.2	0.2
Petroleum	1.0	3.4	2.0	-3.3	-4.0
Rubber	1.8	2.3	2.0	-0.5	2.6
Leather	1.1	1.0	1.7	1.2	0.1
Stone, Clay & Glass	1.2	2.0	0.9	0.1	-0.2
Primary Metals	0.1	0.9	0.9	-2.0	-1.9
Fabricated Metals	1.5	1.7	1.3	0.8	1.8
Machinery, exc. Elec.	1.3	1.4	1.4	0.8	1.8
Electrical Machinery	3.6	4.3	2.8	3.2	3.0
Transportation Equipment	1.9	3.4	2.3	0.2	-2.3
Instruments	2.7	3.6	2.5	0.9	2.2
Miscellaneous Manufac.	2.3	2.3	3.6	1.9	0.0
Nonfarm Nonmanufacturing	1.2	1.9	1.1	0.1	-0.1
Mining	0.6	2.3	1.7	-4.1	-1.9
Construction	0.2	2.4	-1.0	-3.0	-1.5
Transportation	1.5	2.0	2.4	1.2	-2.1
Railroad	2.4	4.2	1.2	0.4	0.3
Nonrail	0.8	0.5	2.7	1.2	-2.7
Communications	4.3	5.4	3.2	3.8	2.3
Public Utilities	2.6	5.5	1.5	-1.0	-1.9
Trade	2.0	2.4	2.6	0.7	1.4
Finance & Insurance	0.1	1.0	0.3	-1.1	-2.0
Real Estate	1.1	1.9	0.0	2.6	-2.1
Services	0.2	0.3	-0.2	-0.2	1.4
Nonfinancial Corporate Business	1.8	2.6	1.5	0.6	0.7

Table III b.

Labor Productivity
(Output per Hour)
By Major Industries of the Economy
(Selected Periods, 1948 - 83)

	Average Annual Rates of Change				
	1948-83	1948-65	1965-73	1973-79	1979-83
Business Economy	2.3	3.2%	2.4%	0.8%	1.1%
Goods Producing Industries	2.9	4.0	2.7	0.8	1.5
Service Producing Industries	1.8	2.3	2.1	0.7	0.8
Farming	4.3	5.3	4.8	3.2	0.4
Manufacturing	2.6	3.0	2.8	1.5	2.4
Food	3.0	3.2	4.6	0.6	3.0
Tobacco	2.8	4.0	4.0	2.6	-4.0
Textiles	4.5	5.0	3.3	4.5	4.6
Apparel	2.7	2.0	3.3	3.5	3.3
Lumber	2.9	4.3	1.8	1.4	1.5
Furniture	2.0	2.1	1.1	3.9	0.5
Paper	2.9	2.5	4.5	1.3	3.4
Printing & Publishing	1.5	2.4	1.5	-0.8	1.3
Chemicals	4.0	4.8	4.8	2.5	1.7
Petroleum	3.0	5.5	3.3	-1.9	-0.3
Rubber	2.1	2.5	2.2	0.0	3.1
Leather	1.4	1.2	2.2	1.6	0.8
Stone, Clay & Glass	1.9	2.6	1.2	0.9	1.7
Primary Metals	1.0	1.5	1.5	-1.3	1.4
Fabricated Metals	2.0	2.1	1.5	1.3	3.1
Machinery, exc. Elec.	2.0	1.7	2.0	1.3	3.9
Electrical Machinery	4.1	4.5	3.4	3.8	4.2
Transportation Equipment	2.6	3.6	3.1	1.0	-0.1
Instruments	3.2	3.8	3.1	1.2	3.6
Miscellaneous Manufac.	2.8	2.8	4.0	2.2	1.0
Nonfarm Nonmanufacturing	1.7	2.4	1.8	0.3	0.7
Mining	1.5	4.3	2.4	-5.3	-1.1
Construction	0.4	2.6	-0.9	-3.0	-1.3
Transportation	1.8	2.3	2.6	1.3	-1.5
Railroad	3.1	4.8	1.7	0.4	2.9
Nonrail	1.1	0.8	3.2	1.6	-2.2
Communications	5.7	6.5	4.8	5.3	4.6
Public Utilities	4.2	6.9	3.8	0.7	-0.8
Trade	2.4	2.8	3.2	1.0	1.8
Finance & Insurance	0.9	1.3	1.2	-0.1	0.0
Real Estate	0.3	1.2	0.1	-0.1	-2.6
Services	0.5	0.9	0.3	-0.4	1.2
Nonfinancial Corporate Business	2.2	3.1	2.1	0.7	1.3

Table III c.

Capital Productivity
(Output per Unit Capital)
By Major Industries of the Economy
(Selected Periods, 1948 - 83)

	Average Annual Rates of Change				
	1948-83	1948-65	1965-73	1973-79	1979-83
Business Economy	0.1%	0.8%	0.1%	-0.4%	-1.7%
Goods Producing Industries	0.2	1.1	0.8	-1.3	-2.7
Service Producing Industries	0.2	0.5	-0.2	0.3	-0.9
Farming	-0.1	-0.3	0.0	0.1	0.1
Manufacturing	-0.1	0.9	0.3	-1.7	-3.0
Food	1.3	2.1	2.5	-1.9	0.4
Tobacco	-2.0	-1.4	0.4	-1.3	-10.1
Textiles	-0.3	-1.6	1.5	1.1	-0.1
Apparel	0.4	1.3	-0.9	-0.3	0.2
Lumber	1.3	5.2	-1.4	-3.3	-2.8
Furniture	0.6	2.0	-1.2	0.4	-1.4
Paper	0.6	1.5	2.5	-3.1	-1.4
Printing & Publishing	0.3	2.6	-1.7	-2.4	-0.9
Chemicals	1.3	2.2	3.1	-1.1	-2.0
Petroleum	-0.5	1.5	0.9	-4.1	-5.8
Rubber	0.5	1.3	1.0	-2.3	0.5
Leather	-1.8	-0.7	-3.0	-1.9	-3.8
Stone, Clay & Glass	-1.0	-0.1	-0.1	-2.3	-4.8
Primary Metals	-2.9	-1.7	-1.0	-4.2	-9.5
Fabricated Metals	-1.5	-1.2	-0.3	-2.3	-3.6
Machinery, exc. Elec.	-1.3	-0.6	-1.1	-1.3	-4.3
Electrical Machinery	1.4	3.5	-0.7	0.5	-1.4
Transportation Equipment	-0.1	2.8	-1.0	-2.1	-7.3
Instruments	0.9	1.8	0.4	0.3	-1.0
Miscellaneous Manufac.	-0.2	-0.6	2.0	0.3	-3.5
Nonfarm Nonmanufacturing	-0.1	0.4	-0.4	-0.1	-1.3
Mining	-1.5	-2.0	0.7	-2.4	-3.0
Construction	-2.3	-1.7	-2.7	-2.4	-4.0
Transportation	-0.1	-0.1	1.3	0.9	-4.5
Railroad	-1.1	-0.3	-1.1	0.2	-6.9
Nonrail	-1.3	-1.4	0.0	-0.5	-4.5
Communications	0.7	0.3	0.8	2.0	0.2
Public Utilities	0.6	2.8	-0.5	-2.1	-2.5
Trade	-1.1	-1.1	-1.4	-0.7	-0.8
Finance & Insurance	-3.6	-1.4	-4.6	-5.3	-8.1
Real Estate	1.2	1.9	0.0	2.9	-2.0
Services	-0.6	-1.2	-1.1	0.4	1.9
Nonfinancial Corporate Business	0.3	0.9	-0.1	0.4	-1.0

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Table III d.

Capital - Labor Ratio
By Major Industries of the Economy
(Selected Periods, 1948 - 83)

	Average Annual Rates of Change				
	1948-83	1948-65	1965-73	1973-79	1979-83
Business Economy	2.2%	2.4%	2.3%	1.2%	2.8%
Goods Producing Industries	2.7	2.8	1.9	2.1	4.3
Service Producing Industries	1.7	1.8	2.3	0.5	1.7
Farming	4.4	5.7	4.8	3.1	0.3
Manufacturing	2.8	2.1	2.5	3.2	5.6
Food	1.7	1.1	2.0	2.6	2.6
Tobacco	5.0	5.5	3.7	4.0	6.8
Textiles	4.7	6.7	1.8	3.4	4.7
Apparel	2.3	0.6	4.2	3.8	3.1
Lumber	1.6	-0.9	3.2	4.9	4.4
Furniture	1.4	0.1	2.4	3.4	1.9
Paper	2.3	1.0	2.0	4.5	4.9
Printing & Publishing	1.2	-0.2	3.3	1.6	2.2
Chemicals	2.7	2.5	1.7	3.6	3.8
Petroleum	3.5	4.0	2.4	2.3	5.9
Rubber	1.5	1.1	1.2	2.3	2.6
Leather	3.3	1.9	5.3	3.6	4.8
Stone, Clay & Glass	2.9	2.7	1.3	3.3	6.8
Primary Metals	4.0	3.2	2.5	2.9	12.0
Fabricated Metals	3.5	3.4	1.8	3.7	7.0
Machinery, exc. Elec.	3.3	2.4	3.1	2.6	8.6
Electrical Machinery	2.6	0.9	4.2	3.3	5.7
Transportation Equipment	2.7	0.8	4.2	3.2	7.8
Instruments	2.3	2.0	2.7	1.0	4.6
Miscellaneous Manufac.	3.0	3.5	2.0	1.9	4.6
Nonfarm Nonmanufacturing	1.8	2.0	2.2	0.4	2.0
Mining	3.1	6.3	1.7	-3.0	2.0
Construction	2.7	4.3	1.8	-0.6	2.9
Transportation	1.9	2.4	1.3	0.4	3.2
Railroad	4.3	5.1	2.8	0.2	10.6
Nonrail	2.4	2.2	3.2	2.1	2.5
Communications	4.9	6.2	3.9	3.2	4.4
Public Utilities	3.6	4.0	4.3	2.8	1.8
Trade	3.6	3.9	4.7	1.7	2.7
Finance & Insurance	4.7	2.8	6.1	5.5	8.8
Real Estate	-0.9	-0.7	0.1	-2.9	-0.6
Services	1.1	2.1	1.4	-0.8	-0.7
Nonfinancial Corporate Business	1.9	2.2	2.2	0.4	2.4

Table VII
Quarterly Indexes of Productivity
1983 I to 1984 II
Total Factor, Labor, Capital and Capital/Labor Ratio
(1977=100)

1. **Business Economy**

		Total Factor Productivity	Output per Unit Labor	Output per Unit Capital	Capital-Labor Ratio
1983	I	98.4	102.2	91.8	111.3
	II	100.2	103.6	94.0	110.2
	III	101.2	104.3	95.6	109.1
	IV	101.9	104.7	96.8	108.2
1984	I	103.2	105.7	98.7	107.2
	II	104.5	106.8	100.3	106.5
1982		97.7	100.9	91.6	110.2
1983		100.2	103.7	93.8	110.6
Percent Change: (Annual Rate)					
1983	I	2.5	2.1	3.1	-0.9
	II	7.4	5.9	10.1	-3.8
	III	4.2	2.8	7.0	-4.0
	IV	2.7	1.4	5.0	-3.4
1984	I	5.3	4.0	8.0	-3.7
	II	5.0	4.0	6.8	-2.6
1982		-1.4	0.2	-4.5	4.9
1983		2.6	2.7	2.3	0.4

2. **Goods Producing Industries**

1983	I	99.6	104.6	86.1	121.4
	II	100.5	105.0	88.2	119.0
	III	103.5	107.4	92.6	116.1
	IV	103.6	107.4	93.1	115.3
1984	I	105.8	109.0	96.6	112.9
	II	106.8	109.6	98.6	111.2
1982		99.8	104.2	87.5	119.1
1983		101.8	106.0	89.8	118.0
Percent Change: (Annual Rate)					
1983	I	-2.3	-3.6	1.3	-4.8
	II	3.7	1.5	10.0	-7.7
	III	12.6	9.7	21.2	-9.5
	IV	0.4	-0.3	2.5	-2.7
1984	I	8.5	6.2	15.6	-8.2
	II	3.8	2.3	8.5	-5.7
1982		-0.5	1.7	-6.2	8.4
1983		2.0	1.7	2.7	-0.9

Table VII (Cont'd)
Quarterly Indexes of Productivity
1983 I to 1984 II
Total Factor, Labor, Capital and Capital/Labor Ratio
(1977=100)

3. Service Producing Industries

		Total Factor Productivity	Output per Unit Labor	Output per Unit Capital	Capital-Labor Ratio
1983	I	98.5	100.6	96.0	104.8
	II	100.8	102.7	98.4	104.4
	III	100.5	102.3	98.2	104.2
	IV	101.5	103.0	99.9	103.1
1984	I	102.3	103.6	100.7	102.9
	II	103.6	104.9	102.2	102.7
1982		97.2	98.8	94.7	104.3
1983		100.0	102.1	97.0	105.3
Percent Change: (Annual Rate)					
1983	I	5.2	5.8	4.4	1.4
	II	9.4	8.7	10.4	-1.5
	III	-1.1	-1.4	-0.7	-0.6
	IV	4.3	2.6	6.9	-4.1
1984	I	3.0	2.6	3.5	-0.9
	I	5.4	5.1	5.9	-0.7
1982		-1.6	-0.7	-3.1	2.5
1983		3.0	3.4	2.4	1.0

4. Nonfinancial Corporate Business

1983	I	102.0	104.0	97.1	107.0
	II	104.2	105.8	100.3	105.5
	III	105.9	107.2	102.6	104.5
	IV	106.1	107.2	103.7	103.4
1984	I	107.1	108.1	104.7	103.3
	II	107.5	108.6	105.1	103.3
1982		101.2	102.6	97.2	105.6
1983		104.3	106.1	99.8	106.3
Percent Change: (Annual Rate)					
1983	I	3.7	3.2	5.1	-1.8
	II	9.1	7.5	13.7	-5.5
	III	6.4	5.3	9.4	-3.7
	IV	1.0	-0.2	4.3	-4.3
1984	I	3.7	3.6	3.9	-0.4
	II	1.7	1.7	1.6	0.1
1982		-0.1	1.0	-3.1	4.3
1983		3.1	3.3	2.7	0.6

Table VII (Cont'd)
Quarterly Indexes of Productivity
1983 I to 1984 II
Total Factor, Labor, Capital and Capital/Labor Ratio
(1977=100)

		Total Factor Productivity	Output per Unit Labor	Output per Unit Capital	Capital-Labor Ratio
		5. Farming			
1983	I	111.3	116.1	107.1	108.5
	II	98.1	100.4	96.1	104.4
	III	105.3	106.9	103.6	103.0
	IV	99.1	104.8	94.1	111.4
1984	I	110.9	116.7	105.8	110.2
	II	113.8	115.2	112.6	102.4
1982		121.4	128.5	114.5	112.2
1983		103.6	106.0	100.7	105.3
Percent Change: (Annual Rate)					
1983	I	-37.8	-44.0	-31.8	-17.8
	II	-39.7	-44.2	-35.1	-14.0
	III	32.5	28.9	36.1	-5.3
	IV	-21.5	- 7.7	-32.4	36.5
1984	I	56.8	53.4	59.9	- 4.0
	II	10.9	-4.9	27.9	-25.7
1982		- 1.5	-0.1	- 2.7	2.7
1983		-14.7	-17.5	-12.1	-6.1
		6. Manufacturing Industry			
1983	I	101.2	109.1	83.3	131.0
	II	103.4	110.8	86.4	128.3
	III	106.5	113.4	90.2	125.7
	IV	106.9	113.1	91.9	123.2
1984	I	108.3	114.2	94.0	121.5
	II	109.4	115.2	95.1	121.1
1982		100.1	107.1	84.0	127.5
1983		104.4	111.6	87.5	127.6
Percent Change: (Annual Rate)					
1983	I	5.6	4.8	7.5	-2.5
	II	9.2	6.4	15.6	-8.0
	III	12.4	9.7	19.0	-7.8
	IV	1.5	-1.0	7.6	-7.9
1984	I	5.5	3.7	9.7	-5.4
	II	4.0	3.6	4.7	-1.0
1982		-0.7	2.1	-7.1	9.9
1983		4.3	4.3	4.2	0.1

Table VII (Cont'd)
Quarterly Indexes of Productivity
1983 I to 1984 II
Total Factor, Labor, Capital and Capital/Labor Ratio
(1977=100)

7. Nonfarm Nonmanufacturing Industry

		Total Factor Productivity	Output per Unit Labor	Output per Unit Capital	Capital-Labor Ratio
1983	I	97.1	99.2	94.0	105.5
	II	99.2	101.2	96.3	105.1
	III	99.1	100.9	96.5	104.5
	IV	99.9	101.3	97.8	103.6
1984	I	100.8	101.9	99.1	102.8
	II	102.2	103.2	100.7	102.5
1982		95.9	97.5	93.1	104.8
1983		98.6	100.6	95.1	105.8
Percent Change: (Annual Rate)					
1983	I	3.8	4.2	3.2	0.9
	II	9.0	8.5	10.0	-1.3
	III	-0.5	-1.3	0.9	-2.2
	IV	3.2	1.8	5.7	-3.7
1984	I	3.5	2.4	5.4	-2.9
	II	5.6	5.1	6.6	-1.4
1982		-1.3	-0.3	-3.3	3.3
1983		2.8	3.2	2.1	1.0

Note: Percent changes are average annual rates of change from the previous quarter. Output and labor are revised, as published by the Bureau of Labor Statistics, Department of Labor, August 27, 1984, "Productivity and Costs" release. Capital of revisions are based on Department of Commerce estimates.